

**PP-039** High use rates of tobacco among adolescents in rural areas of the Indian state of Uttarakhand: The role of fathers

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**Background and Aim:** About one fifth of the deaths attributed to tobacco worldwide occur in India, where it is illegal for minors under 18 years of age to purchase or use tobacco products. To guide tobacco control efforts, we conducted a community-based study to estimate the prevalence of tobacco use among adolescents in the Indian state of Uttarakhand.

**Methods:** We randomly selected 20 households in 30 clusters in the block of Gadarpur of the Udham Singh Nagar district. We interviewed adolescents between 13 and 15 years of age using semi-structured questionnaires between September and December 2005. We calculated prevalence and prevalence ratios using Epi-Info.

**Results:** We recruited 600 adolescents (Median age: 14 years, 27% of females). 179 subjects (30%, 95% confidence interval (CI) = 26–34%) reported having ever used tobacco (28%, 95% CI = 21–35 and 27%; 95% CI = 20–34 for smoking and smokeless form of tobacco use, respectively. Males were more likely to have ever used tobacco (prevalence ratio [PR]: 1.7, 95% CI = 1.2–2.3), 376 of the 595 adolescents (63%) from whom the information was available had a father using tobacco. This was associated with a higher prevalence of current tobacco use (PR: 3, 95%; CI = 2–4).

**Conclusion:** The high prevalence of tobacco use among adolescents is a cause of substantial concern. Legal restrictions on sale and use of tobacco products are ineffective. Innovative strategies involving parents and peers are needed to stop this developing epidemic.

**PP-040** Application of SIR epidemiological model in determination of measles epidemics

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**Introduction:** In the nineteenth century recurrent epidemics of cholera and influenza and decreasing cases of diseases in the later years caused that produce the question why communicable disease would suddenly produce epidemics and disappears then. Designing one model bases mathematical such as SIR model have been done for the question response the aim of research survey model on the measles in Iran and determination of outbreaks of measles at 1996 and determine necessary least vaccine covering for prediction of measles epidemics in the future.

**Methods and Materials:** With collection of data from disease control center, the number of suffering to measles, age mean of measles and life expanses calculated and the number of suffering to measles, age mean of measles and life expanses calculated and the amount of R0 (Basic Reproduction Rate) resulted.

**Results:** Calculating R0 amount at range 5.5 to 7.49 have been resulted that for the reason R0 amounts greater than one the measles epidemic has occurred in our country and least effective vaccine covering has been 81.8–86.65%.

**Discussion:** Calculating R0 and necessary least vaccine covering for prediction measles epidemics determine that for epidemic control least vaccine covering, must more than 82.65%. Decreasing herd immunity and increasing measles age mean under conditions due to another epidemic in the 2005.

**Poster Presentation – Basic Science and Animal Models****PP-041** Diagnosis and DNA fragment analysis of *Mycoplasma pneumoniae* in pediatric community-acquired lower respiratory tract infections

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**Background:** *Mycoplasma pneumoniae* (*M. pneumoniae*) is one of the most common causes of upper and lower respiratory tract infections (LRTIs) in children and adults. Since it is difficult to detect *M. pneumoniae* in clinical practice specific etiology is established in a minority of cases. The diagnosis in most cases is confirmed by serology. Polymerase chain reaction (PCR) has been found to be useful for rapidly detecting this pathogen in respiratory secretions.

**Methods:** We studied 200 children for community-acquired lower respiratory tract infections for the detection of specific IgM and IgG antibodies to *M. pneumoniae*. PCR was applied to amplify a 543 base pairs region of P1 adhesin gene of *M. pneumoniae* from nasopharyngeal aspirates (NPA). PCR amplicons were subjected to DNA restriction analysis employing Hae III restriction enzyme.

**Results:** Serological evidence of *M. pneumoniae* infection was observed in 68 (34%) patients. PCR was positive from NPA in 17 (25%) patients with serological evidence and in 3 (2.27%) children without serological evidence of *M. pneumoniae* infection. Overall, PCR for *M. pneumoniae* was positive in 20 (10%) patients. Serological and/or PCR positive results detected *M. pneumoniae* infection in 71 (35.5%) of 200 patients. Upon restriction polymorphism digestion of the PCR amplicon fragment with Hae III distinctive banding patterns were noted that split *M. pneumoniae* into two groups.

**Conclusions:** It is probably not possible to differentiate *M. pneumoniae* LRTIs from non *M. pneumoniae* LRTIs on the basis of clinical presentation. Our study confirms the role of *M. pneumoniae* in Indian children with community-acquired LRTIs, even in children aged <5 years.

**PP-042** Clinical research of HG-2000 regional high-frequency hyperthermia combined with TACE in hepatocellular carcinoma

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**Objective:** To observe the effect of regional high-frequency hyperthermia combined with hepatic arterial chemoembolization (TACE) in hepatocellular carcinoma.

**Method:** Regional high-frequency hyperthermia combined with TACE for combined treatment group, 30 cases; only TACE For control group, 26 cases. For combined treatment group, we apply transcatheter hepatic arterial chemoembolization after regional hyperthermia 1–3 days, using seldinger's puncturation, time of regional hyperthermia is 60 minutes a day – two times a week, five times for every patient.

**Result:** Therapeutic effect according to WHO solid tumor evaluation standard-effective ratio of combined treatment group is 51.7%, effective ratio of control group is 36%, P<0.05. survival rate is 58.8% for 1 year in combined treatment group – 47.35% in control group – group comparison P<0.05. At the same time, effective ratio of